

AMENDMENT

RECEIVED
JAN 21 2003
TECH CENTER 1600/2900

In the Claims:

Please amend the claims as follows:

Please cancel claims 5-~~12~~, 14-~~50~~ and ~~53~~ without prejudice to their prosecution in additional applications.

Please replace the presently pending claims with the following claims:

¹
~~54~~. An isolated PHELIX protein having the amino acid sequence as shown in FIG. 2 (SEQ ID NO: 2).

²
~~55~~. The PHELIX protein of claim ¹~~54~~, further comprising a heterologous polypeptide.

¹
C 60. (Twice amended) An isolated polypeptide of at least 15 contiguous amino acids of the sequence shown in SEQ ID NO: 2, which comprises amino acid residues 140-154 of SEQ ID NO: 2 wherein the polypeptide is recognized by an antibody that specifically binds a PHELIX protein having the amino acid sequence of SEQ ID NO: 2.

⁴
~~61~~. The PHELIX polypeptide of claim ³~~60~~, further comprising a heterologous polypeptide.

²
C 68. (Twice amended) An isolated polypeptide that is at least 90% identical to the amino acid sequence of SEQ ID NO: 2 over the entire length of SEQ ID NO: 2 and that is a conservative substitution mutant of a protein having the amino acid sequence of SEQ ID NO: 2 wherein the polypeptide is recognized by an antibody that specifically binds a PHELIX protein having the amino acid sequence of SEQ ID NO: 2.

⁶
~~69~~. The PHELIX polypeptide of claim ⁵~~68~~, further comprising a heterologous polypeptide.

74. A PHELIX polypeptide produced by culturing a host cell that contains an expression vector that comprises an isolated polynucleotide selected from the group consisting of:

- (a) a polynucleotide having the sequence as shown in FIG. 2 (SEQ ID NO: 1), wherein T can also be U;
- (b) a polynucleotide having the sequence as shown in FIG. 2 (SEQ ID NO: 1), from nucleotide residue number 735 through nucleotide residue number 1949, wherein T can also be U;
- (c) a polynucleotide encoding a PHELIX polypeptide whose sequence is encoded by the cDNA contained in the plasmid as deposited with American Type Culture Collection as Accession No. 98956; and
- (d) a polynucleotide encoding a PHELIX protein having the amino acid sequence shown in FIG. 2 (SEQ ID NO: 2).

75. The PHELIX polypeptide of claim 74, further comprising a heterologous polypeptide.

76. A composition for eliciting formation of antibodies directed to a cell that expresses a PHELIX protein, the composition comprising:

- (a) a PHELIX protein according to claim 54; and
- (b) a pharmaceutically acceptable carrier.

77. A composition for eliciting formation of antibodies directed to a cell that expresses a PHELIX protein, the composition comprising:

- (a) an immunogenic portion of a PHELIX protein according to claim 60; and
- (b) a pharmaceutically acceptable carrier.